19980217.ba v01_n926.bam.980217 v01_n927.bam.980217

>From ???@??? Wed Feb 18 05:36:35 1998
Message-Id: <199802171550.JAA19867@sco.theporch.com>
Date: Tue, 17 Feb 1998 09:50:55 CST
Subject: BOATANCHORS digest 1926

BOATANCHORS Digest 1926

Topics covered in this issue include:

 1) subminiature tube life
 by laffitte@prtc.net (laffitte)
 2) Found Connectors for EV 630 Mic
 by kb5wwo@juno.com (George T Folse)
 3) Eimac HR-6 Plate Connectors
 by "Jay H. Miller" <jmiller@teleteam.net>
 4) Russian Nationals?
 by "Lawrence R. Ware" <lrware@pipeline.com>
 5) Re: Tek 545A high voltage problem?
 by Henry van Cleef <vancleef@netcom.com>
 6) oddball Collins?
 by "Lawrence R. Ware" <lrware@pipeline.com>
 7) T-195B parts needed, etc.
 by "Mark J. Blair" <mblair@gruumsh.irv.ca.us>
 8) Sweep Tube Uses
 by arc5@ix.netcom.com
 9) Oddball Collins?
 by Marty Raine <mraine@compusmart.ab.ca>
 10) 'New' HP-200CD arrived!
 by "JOSE V.GAVILA (EB5AGV/EC5AAU)" <eb5agv@ctv.es>
 11) re: Tek 545A high voltage problem
 by Scott Robinson <spr@earthlink.net>
 12) Si diodes, 5U4s, and filter cap ratings
 by Scott Robinson <spr@earthlink.net>
 13) Help locating a Hallicrafter SR-150
 by Steve Modena <ab4el@MindSpring.com>
 14) washer on spindle
 by Bill Jarvis <b.h.jarvis@hw.ac.uk>
 15) ultra-audition
 by Bill Jarvis <b.h.jarvis@hw.ac.uk>
 16) RE: Need T601 for 390
 by Bill Wilson <billo@internettport.net>
 17) BC 223 supply at NJ Radio Meet
 by Paul Thekan <Paul.Thekan@eimac.cpii.com>
 18) Boatanchors For Sale
 by don merz <71333.144@compuserve.com>

Date: Mon, 16 Feb 1998 22:37:33 -0400
From: laffitte@prtc.net (laffitte)
To: boatanchors@theporch.com
Subject: subminiature tube life
Message-ID: <34E8F7E6.20BE01B3@prtc.net>

Hi BAers!

 The SRR11,12,13 all use subminiature tubes except in the power supply. My SRR12 seems to be doing just fine with its original subs. All the PS tubes (6X4s and the elusive 1H4T ballast) had to be replaced. Does anyone know the failure rate of these subs or were they designed to last longer than miniature tubes? Just curiosity.
 By the way, cooler air finally made down here. The weather has been fantastic. Cool and dry. Keep blowing it this way :>).

Best 73s
Guido E. Santacana KP4FAR
BA collector in the tropics

Date: Mon, 16 Feb 1998 20:50:54 -0600
From: kb5wwo@juno.com (George T Folse)
To: boatanchors@sco.theporch.com
Subject: Found Connectors for EV 630 Mic
Message-ID: <19980216.205058.9454.0.kb5wwo@juno.com>

 I sold someone out here a EV 630 Mic a few months ago,and I did not have any connectors at the time. I do have some now,so please email direct and I will send you one free of charge.
Thanks for the band space,

George Folse III KB5WWO kb5wwo@juno.com or kb5wwo@bellsouth.net
630 Dolhonde St.
Gretna,La. 70053
504-362-1896 ph/fax
Collector of Johnson,Heath,& Atwater Kent AMI#937

You don't need to buy Internet access to use free Internet e-mail.
Get completely free e-mail from Juno at http://www.juno.com
Or call Juno at (800) 654-JUNO [654-5866]

Date: Mon, 16 Feb 1998 20:53:52 -0500
From: "Jay H. Miller" <jmiller@teleteam.net>
To: boatanchors@theporch.com
Subject: Eimac HR-6 Plate Connectors
Message-ID: <l03110700b10e9d0f6711@[199.34.24.6]>

Need four (4) Eimac HR-6 heat dissipating plate connectors (plate caps) for
the 4-125, 4-250, 4-400 etc.

Thanks.

 ********** ##################### **********
 Jay H. Miller, KK5IM Dallas, Texas
 The Pocket Guide to Collins Amateur Radio Equipment
 AMI#846 Collins Collectors Association
 E-Mail: jmiller@teleteam.net
Visit My Home Page: http://www.teleteam.com/~jmiller/
 ***** Proud to be 100% Macintosh since 1984! *****

Date: Mon, 16 Feb 1998 21:50:49 +0000
From: "Lawrence R. Ware" <lrware@pipeline.com>
To: boatanchors@sco.theporch.com, national@qth.net
Subject: Russian Nationals?
Message-ID: <3.0.5.32.19980216215049.00826100@pop.pipeline.com>

Evening folks; through the kindness of Bill Fizette and Alan Douglas,
(both of the A.W.A.) I recently was given photocopies (several hundred!)
of photographs from the National Radio Companies marketing dept.
archives... :-) I'm still trying to index and sort through a lot of
these, but I have a number showing NC-100 variants with Cyrillic
(Russian) language markings on the front panels!
(Gad-Zookes! Batman, how many of these were made?)
I suspect I'm looking at WWII lend-lease program goods...
A couple of questions for the esteemed members:

1) Anyone ever see one of these in the "steel" so to speak?
2) Wonder how many might still be around?
3) Anyone got one they want to sell? Or perhaps trade for my first
born son?
4) Anyone a) speak Russian, b) free for a little "hunting" trip
the other side of the iron curtain? :-)
"...Radios, Mr. Customs officer, just old radios. I bought the entire

container load for scrap, worth pennies on the pound if that...
...That's right they are of American origin, so no duty is due..."
<grin>

-Larry

Larry Ware
Admirer, Collector, Restorer of National Radio Company
receivers and other artifacts.
Orlando, Florida
lrware@pipeline.com

Date: Mon, 16 Feb 1998 20:38:36 -0700 (MST)
From: Henry van Cleef <vancleef@netcom.com>
To: allent@EN.COM
Cc: boatanchors@theporch.com
Subject: Re: Tek 545A high voltage problem?
Message-ID: <199802170338.TAA14913@netcom12.netcom.com>

As Allen Tucholski discourses
>
> Picked up a pretty nice Tek 545A. I checked it out, and found the trace was dim.
> Checked all the low voltages, and they are right on.
>
> +500 OK
> +350 OK
> +225 OK
> +100 OK
> -150 OK
>
> Here is the problem. At the high voltage test point I should see -1350 volts.
> I am only getting 750 -800 volts. I tried to adjust R840 (H.V. adjust) and
> it has no response.
> The pot itself is good (2 meg Ohm's)
>
> I checked the voltage as per the diagram.
>
> V814, 12AU7 (tested tube and its good)
> pin 7 and 1 should be -4 volts, I am getting -134
> pin 8 screen of 6AU5 should be -85 i am getting +305 volts
>

I'm responding on the list, because HV woes in Tek scopes are a bit
frightening to diagnose. The circuits are fairly simple, and Stan's
book on scopes gives a good sequence of tests for checking out HV

problems.

You don't have -1350 at the test point. Of course the voltages in the rest of the circuit are going to be way off, but I am a bit puzzled at some of the voltages you report.

The feedback voltage with -1350 correct, to pin 3 (grid) of the 12AU7 control tube, is around -155 volts. With -1350 low, it is going to be pulled up, but can't go very far, because the cathode of that section is tied to -150. That side of the triode will go into saturation, with the plate pulled down, as you noted, toward -150, when the normal operating point is 0 volts.

The screen voltage on the 6AU5, which controls the depth of oscillations, normally runs about +75 to +85 volts. If the left triode is cut off (as it certainly will be with -130 volts of bias---note that it's cathode is connected directly to 0 volts), all screen current will come from +350 regulated thru R803, a 56K resistor. My recollection is that with the 6AU5 oscillating wide open, you'll only see about 150 volts there----the screen draws current through that 56K.

I am not going to jump to conclusions here, and am going to strongly suggest that you follow Stan's methods (and if you don't have his book, you should---you can buy it from Stan directly), although I'll outline some of this, as I think you should work methodically with this one.

Make yourself a grounding stick. A test prod with a 1K resistor at the end of it works well. Connect one end to ground, and be prepared to use the grounding stick on ALL points in the HVPS after you power down and before you touch anything. This includes the oscillator circuit with the 6AU5 and control circuit with the 12AU7. Tek scopes have huge caps in them, and under fault conditions, you can't guarantee that anything is discharged or that high voltages are not where ground is supposed to be.

1. Disconnect the CRT HV lead and unplug the CRT socket. This will get the CRT out of the circuit and assure that you don't have 1350 volts between the CRT cathode and grid (rough on CRT's).

2. Pull the 12AU7 out of its socket. Power up the scope. If you've got more than -1350 volts at the test point (watch out, with the regulator out, you may get -1500----I do not handle test prods at these voltages, but clip in place, then power up. Your meter should handle this higher voltage. For short periods, the scope will handle them OK. Anyway, if you've got more than -1350, your troubles are in the 12AU7 circuit. Running open like this, the grid signal at pin 2

of the 12AU7 should be solidly below -150----I'd expect -170 or -180, in proportion to the excess measured at the -1350 test point. If it isn't check the resistors in the divider. If one of those 4.7 meg resistors on the HV board is breaking down, the divider won't work.

3. If the pain persists, try another 6AU5. Don't bother with toob testers. Try another toob. If nothing changes, you know it isn't the toob.

4. If -1350 is still low:
 a. Check oscillator frequency. Should be about 50 Khz.
 b. Check grid bias on G1 (pin 1) of the 6AU5. Should be around -60 volts. Lots more means the tube is really pumping like crazy (unlikely without drawing a bunch more screen current).
 c. Check the plate voltage on the 6AU5. Should be around fairly close to the supply voltage (which is unregulated) but show current draw. Check the 390 ohm plate supply resistor.

DC check that the grid leak really is 100K. Also, the .001 timing cap across the transformer primary and the .01 grid blocking cap need to be those values, not some approximation. The oscillator itself is a plain vanilla Hartley.

5. If you still are getting nowhere, take the cover off the HVPS, and use the shorting stick at ALL POINTS. Remember, there's a tripler in there, with caps that are charged up to about 2800 volts.

Disconnect all three output wires from the power supply. One is to the CRT cathode, one to the CRT grid, and one to the PDA (post-deflection acceleration) terminal through a variety of things on the focus-and-intensity chassis (the covered section over the CRT opposite the HVPS).

Now try the scope. If you've got -1350, you've got troubles in the F+I chassis side. Reconnect the outputs, one at a time, in this order:
 a. CRT cathode circuit (the one that has the test point).
 b. CRT grid circuit (the unblanking floating battery, which runs at about -1500).
 c. The +8650 PDA circuit.

Test the scope after connecting one output. The last one connected before seeing the output drop is the one with the fault.

6. If connecting the cathode circuit kills the output, disconnect the CRT heater leads at the power transformer and retest. This will check

for leakage in the transformer.

7. Easiest way to check components in the F+I circuits is to lift leads and try things, one at a time. F+I chassis problems are very common, particularly with the non-A scopes that used the old Sprague black oil-filled caps. I don't recall when Tek changed to ceramics, but it was about the time the A 530 and 540 series were introduced (1959-60). Newark still carries the Sprague ceramics used in the A models.

If disconnecting all three power supply leads doesn't get you -1350, then your troubles are in the HVPS itself. Disconnect the three tripler diodes, and try things, then the CRT grid diode. Final test is to disconnect the CRT cathode diode (which will kill the -1350 voltage)----in this test you'll have to check to see if the oscillator grid voltage changes dramatically, and G2 screen voltage changes as well.

8. If you've gotten this far, and still haven't found the problem, you may have a bad HV transformer. However, replace all the passives in the oscillator circuit first. Don't substitute other values as "close enough." I've shot myself in the foot doing this.

One thing to do is to remove the HVPS card. You'll have to disconnect a bunch of wires on the card (tag carefully, so you can get them all back in the right place). Then disassemble the card and clean everything. The HVPS tends to grab a lot of dirt.

Last I knew, Fair was selling HVPS cards for these scopes as complete assemblies. I don't know anything about them, but HV transformer failures in the -1350/+8650 power supplies were pretty rare, and a transformer in a used supply is likely to be good (unless you really KNOW it is bad).

Readers should note that the -1650/+8350 supplies used on 547 do have a known problem with the HV transformer (see Stan's book). I think with a 545A, you'll clear the fault before you get to the point that you question the transformer. Stan (who's seen more field problems than I have) may want to comment here as well.

--
==========
Hank van Cleef
==========

Date: Mon, 16 Feb 1998 22:01:02 +0000
From: "Lawrence R. Ware" <lrware@pipeline.com>
To: boatanchors@sco.theporch.com
Subject: oddball Collins?
Message-ID: <3.0.5.32.19980216220102.00832510@pop.pipeline.com>

Hi Gents! anyone know what kind of firebottle rig a Collins
618-S is? Never heard of it myself...

-Larry Ware
lrware@pipeline.com
Orlando, Florida

Date: Mon, 16 Feb 1998 19:11:31 -0800
From: "Mark J. Blair" <mblair@gruumsh.irv.ca.us>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: T-195B parts needed, etc.
Message-ID: <199802170311.TAA03030@gruumsh.irv.ca.us>

I just received my T-195B transmitter from Fair Radio today. Phil said
it was their last one. It arrived in pretty good shape, but I need a
few parts for it:

* Both meters (Fair supplied a battery meter from the non-B model, but
 I'd like to get both correct meters for the -B model if I can).

* Both exhaust vent covers (the small ones on the left side).

* Whip antenna lug (it looks like the important part of mine is broken
 off).

* CX-1599/U dogbone cable to connect it to my R-392 (I have connectors
 to make one, but I'd still like to get an original if I can).

Does anybody know if it will cause any damage to operate the set with
the meters removed?

Is the MP-65 antenna base supposed to have a springy part, or is it
rigid? I ordered an MP-65, but got an MP-68, which looks similar but
is mounted on a metal hunk which lets you stick it on a mast and mount
ground plane radials. If the ceramic part and whip mount (which is
rigid in the one I received) are the same as an MP-65, I won't make a
fuss.

I haven't tried applying power yet; I want to check out as many of the tubes as I can and look for shorts first. I just have a photocopied manual for the non-B model, but it looks like I can get the -B manual from NTIS, according to their web page. All of the fuses were good and correct, and I didn't see anything obviously missing from the innards, so I'm hopeful that it'll show signs of life when I give it some juice.

That's one $@&^#$ heavy radio. Luckily, I only injured one foot and an unimportant part of a wall unpacking it. :-)

In case anybody is interested, it was made by Federal Mfg. & Engineering Corp., order number 4096-PP-60, serial number 1212. It has an overhaul label from Pirmasens Army Depot, with a date code of 2182 (21st week of 1982?).

I also picked up a vehicular mount for a PRC-41 I bought at a swap meet a few weeks ago. I decided to get the $25 mount rather than the $200 battery. :-) Paid more for the mount than I did for the radio. :-)

I was feeling especially loose with my cash, so I also ordered old Fair Radio magazines from 1970 through 1989. I'll put on my drool bib and read those tonight!

Thanks for any help....

--
Mark J. Blair KE6MYK
e-mail: mblair@gruumsh.irv.ca.us
DO NOT SEND ANY UNSOLICITED COMMERCIAL EMAIL TO THIS SITE

Date: Tue, 17 Feb 1998 00:32:18 -0600 (CST)
From: arc5@ix.netcom.com
To: boatanchors@sco.theporch.com
Subject: Sweep Tube Uses
Message-ID: <19982170321035705@>

After all the help I got with the question about what sweep tubes were used in what gear, I misplaced the file!
Well, I found the darned thing and several people asked me to post it, so here it is.

6BQ6 - BROMECO CD-10X/20X, Gonset G-77,

6DQ6: Knight T-60, Johnson Viking Challenger,EICO 753, HEATH DX-20,
Conar 400; EICO 723; Globe DSB-100; Lafayette HE-25

6GJ5: NCX3, Early NCX-5,

6GE5: Heathkit HW-16, -12/22/32,

6HF5: Galaxy III/V/300, WRL Duo-Bander 84, DRAKE 2-MT,
HALLICRAFTERS HT-46/SR-400, SWAN 350/400

6JB6: Drake TR-4/c/cw, T4/x/xb/xc

6JS6 Yaesu Ft-101 line up to FT-101EE.

6KD6 - YASEU FL-2000/FTDX-400, Swan T-600, Hallicrafters HT-46, Galaxy 300,

6LB6 - GALAXY GT-55/Vmk3, WRL DUO-BANDER-II

6LQ6/6JE6 - SBE, Swan 260 & 270; Knight T-175 linear; Swan 500 & 500CX, 350C, 1200W

6MJ6 Swan 700HS

12DQ6 - HALLICRAFTERS SR-150/SR-160

12JB6 Drake TR-3

31LQ6: TBS-2000

7984: GE VHF mobiles

Date: Mon, 16 Feb 1998 23:45:18 -0800
From: Marty Raine <mraine@compusmart.ab.ca>
To: lrware@pipeline.com
Cc: boatanchors@theporch.com
Subject: Oddball Collins?
Message-ID: <34E9400E.476A@compusmart.ab.ca>

Larry...according to my info from the "Collins Quick Reference" by
KK6HY, the 618-S is a transceiver, 1952-54 vintage, 2-25 Mhz, digital,

100 W, AM,CW...67 lbs, 45 tubes. The military version is an
RT-311/ARC-38.

Marty
VE6TS
Edmonton, AB
CCA 179

Date: Tue, 17 Feb 1998 08:19:03 +0100
From: "JOSE V.GAVILA (EB5AGV/EC5AAU)" <eb5agv@ctv.es>
To: "Boatanchors List" <boatanchors@sco.theporch.com>
Subject: 'New' HP-200CD arrived!
Message-ID: <3.0.1.32.19980217081903.006a9d44@192.168.0.1>

Hi gang,

Well, finally I got it!. I have received an HP-200CD after more than two month surface shipping from USA (slow but relatively cheap!) in very good shape. I got it from Ron Black <ron.black@pstbbs.com>, who has been _very_ helpful with this unit and did a superb packaging work. He checked the unit carefully before shipping. By the way, the unit cost was only $40 (plus shipping), a real bargain as you will see...

This unit is a military one, with a blue painted case. One nice thing is that it has a calibration tag dated January 1995, with next revision due January 1997. So the calibration was done only three years ago and, you know, these units are very stable. Nice!.

The front panel is in very good condition, with all knobs in perfect shape. Only thing didn't looked as new was the dial (more on this later).

I've opened it and it is in almost mint condition!. The aluminum chassis is immaculate and all the components and wires are very clean, with only a soft dust layer. I have found some components dated early 1968, the same year that I was born, so it is still young ;-) ;-). It uses miniature tubes (two 6AU6 and two 6CW5).

I've cleaned it with care. The worst part was the dial, as the aluminum was covered with a green layer and didn't shine as usual... I've used a very good metal cleaning product from 3M, called 'Tarni-Shield' and, in about an hour (it was really hard to clean!), the dial is shinning like new. Of course, I got it out of the generator, as I did with the knobs, to clean them easily.

Then I have powered it on and, as expected :-), it works fine, and very accurately (calibration tag was dated 1995, as I said). I've observed that

the two EL86/6CW5 tubes run very hot, but this should be normal, isn't it?. By the way, both of them are HP tubes, made by Amperex in Holland, and dated 1976. And they have IERC tube shields, so the heat gets out of the glass very fast.

I have checked the output signal with my trusty Tek 475 oscilloscope and measured its frequency with an HP-5328A. Both test results were very good; the signal is a clean sinewave and the frequency reflects the dial setting.

I know you can get HP-200CDs at bargain prices at hamfests (in USA, not in Spain :-(), but at $40 and in that wonderful condition, I think I got a very good one. Ron should still have some units left, so if you don't have still a unit and think $40 is a fair price, I would ask him.

Best regards from a happy camper.

JOSE

 73 EB5AGV / EC5AAU
 JOSE V. GAVILA
 Ausias March 46, 15
 46910 Benetusser - VALENCIA
 SPAIN

 http://www.geocities.com/SiliconValley/6992/
 e-mail: eb5agv@ctv.es & eb5agv@amsat.org

Date: Mon, 16 Feb 1998 23:31:14 -0800
From: Scott Robinson <spr@earthlink.net>
To: boatanchors@theporch.com
Subject: re: Tek 545A high voltage problem
Message-ID: <v03007801b10eecb6a1bf@[153.34.139.152]>

Folks,

When I resurrected my Tek 310, I found that the cause of low HV was leakage to ground in the separate filament winding used to feed the CRT. Its cathode and heater are connected together and biased at -1200 volts or so. A separate filament transformer rated at 3 KV isolation solved the problem.

Regards,

Scott Robinson
spr@earthlink.net

Junque is GOOD for you!

Date: Mon, 16 Feb 1998 23:38:35 -0800
From: Scott Robinson <spr@earthlink.net>
To: boatanchors@theporch.com
Subject: Si diodes, 5U4s, and filter cap ratings
Message-ID: <v03007802b10eed6bcc3e@[153.34.139.152]>

Bob Roehrig wrote:

The only thing I have been concerned about in this regard is that
in some gear, the voltage rating of some of the caps is marginal,
so before the tubes start heating and the circuits draw current
to drag the voltage down, the voltage rating of the caps can be
exceeded.

and Scott sez:

Most BAs use 5U4 or 5Y3 rectifiers, which warm up much faster than the
indirectly heated tubes that consume the current. Therefore the filter
caps get charged to the peak voltage with these tubes, and will get about
the same treatment with sand state diodes.

Gear that uses 5V4, 5AR4, 6X5, 6X4, or 83V rectifiers will not be in this
category as these are indirectly heated tubes that warm up at about the
same rate as the rest of the tubes in the equipment.

Transmitters with directly heated PS tubes don't fall in this category, but
they usually have separate B+ switching anyway.

Regards,

Scott Robinson
spr@earthlink.net

Junque is GOOD for you!

Date: Tue, 17 Feb 1998 05:06:42 -0500
From: Steve Modena <ab4el@MindSpring.com>
To: boatanchors@theporch.com
Cc: Cheluto2@aol.com, earroyo@ECUA.NET.ec
Subject: Help locating a Hallicrafter SR-150
Message-ID: <3.0.32.19980217050639.00b97654@mindspring.com>

BA'ers!

I'm forwarding the note below to this BA audience.

If you can help this person, please be sure to send your
email to the addresses indicated. A Cc: to me is OK. :^)
--
73/Steve/AB4EL ab4el@MindSpring modena@SunSITE.unc.edu

>X-Persona: <SunSITE>
>From: Cheluto2@aol.com
>Date: Mon, 16 Feb 1998 23:54:55 EST
>To: modena@sunsite.unc.edu, earroyo@ECUA.NET.ec
>Subject: Need help
>Content-Length: 592
>
>Hi!
>
>I found your page while doing extensive searches for Hallicrafter SR-150.
>My stepfather is a HAM Radio user, and he's in Ecuador (HC2NI), and has asked
>me to help him find a Hallicrafter SR-150. He had one years ago, but due to
>problems with the electricity in Ecuador, it blew.
>
>If there's any way you can help me find one, or if you know of someone that
>might have one in decent shape, please e-mail me at "cheluto2@aol.com", or my
>stepfather at "earroyo@gu.pro.ec", his name is Enrique and mine is Andres.
>
>Any help would be greatly appreciated!
>
>Recgards,
>Andres Chiriboga
>Miami, FL
>

Date: Tue, 17 Feb 1998 11:09:04 +2400
From: Bill Jarvis <b.h.jarvis@hw.ac.uk>
To: <boatanchors@theporch.com>
Subject: washer on spindle
Message-ID: <199802171108.LAA13399@punt1.hw.ac.uk>

Someone asked what a single rotatable washer, near a coil, was for.

Just seen one described. It's a shorted turn (I got that far myself!) which may be turned from parallel to, to perpendicular to, L. It has the effect of reducing L and thereby permitting very fine tuning.

I'd have thought it would simultaneously affect Q but maybe not much.

My (rather common) VHF heterodyne wavemeter uses something similar for set-zero. It's just a spindle with a groove in it, a cm or so from the L.

I assume everyone uses a "wand" with a bit of brass at one end and a bit of ferrite at the other? Makes innocent bystanders think you really DO have mystical powers.

Bill
GM8APX, qthr=No 6, EH4 6JY==No Rectangulars=Cave Felem==Ikke Hawkering

Hennus non potest de aliquid superficere mentem

Net-Tamer V 1.10 - Registered

Date: Tue, 17 Feb 1998 11:08:50 +2400
From: Bill Jarvis <b.h.jarvis@hw.ac.uk>
To: <boatanchors@theporch.com>
Subject: ultra-audition
Message-ID: <199802171108.LAA13386@punt1.hw.ac.uk>

Just seen a photocopy of an ancient article describing VHF and UHF Rxes. One paragraph says "The regenerative detector circuit is an ultra-audion oscillator". The aerial input tuning coil goes to anode, and - through 100 pF - to grid. HT goes by RFC to mid-point of tuning coil.

That looks to me like a conventional oscillator. Maybe the autobias components are relevant: 100 pF and 5 megohms (Rx is for nominal 112 MHz). (That dates it! - When, incidentally?)

Does this help to answer the question "what is an ultra-audion"?

(Separately, they go on to feed the HT from a quench oscillator - it's a superregen Rx said to be suitable only for modulated signals. AM at

that, I'd guess.)

(Usual warnings about radiating for miles.)

With the C and R given, wouldn't it "squeg" but for the quench oscillator? Is that part of the plan?

Can you make a super-regen by just letting it deliberately squeg?

(Distant memories of appalling noises in headphones, followed by deputations from miles around.)

Bill
GM8APX, qthr=No 6, EH4 6JY==No Rectangulars=Cave Felem==Ikke Hawkering

Aiunt multum legendum esse, non multa

Net-Tamer V 1.10 - Registered

Date: Tue, 17 Feb 1998 07:53:35 -0600
From: Bill Wilson <billo@internettport.net>
To: "boatanchors@theporch.com" <boatanchors@theporch.com>
Subject: RE: Need T601 for 390
Message-ID: <34E9965E.A78C7807@internettport.net>

Gerald,

Try Fair radio first. I ordered one from them last month for less than $10. I had two of the transformers go bad in the 390 (non-A) here, both had opened primaries. The manufacturer was Saratoga, they had also been leaking goo out from the terminals. Since R-390 parts are more scarce than the "A" model you might want to pick up a junker/parts set 390/391. I recently picked up a R-391 with a bad PTO as a "back up" for the 390 here.

How does the 390 fair against the 390A?? Well the 390 has much more pleasing audio for SWL'ing and easy listening but when the conditions get tough the "A" model is better for slicing and dicing the stations apart. I do have a problem with the 390 on the 27 MC band: A very noticeable lack of gain and sensitivity. It's not the RF alignment, any suggestions? I was told by some that to avoid the 390 due to it's age related problems (40 plus years and going) but I think with a little work they can be ironed out.

Thanks,

Bill
W4BIZ
Jacksonville, Al.

Date: Tue, 17 Feb 1998 07:02:54 -0800
From: Paul Thekan <Paul.Thekan@eimac.cpii.com>
To: boatanchors@theporch.com
Subject: BC 223 supply at NJ Radio Meet
Message-ID: <2.2.16.19980217071849.0e77aaa2@eitel.eimac.cpii.com>

In Als post of equipt to be auctioned off at the NJARC I noticed there was a PE 125 vibrator supply on the list. This is a supply that is used to run the BC 223 xmtr. Thought I would mention this as there might be someone out there who needs a period supply to get their set up and running and is having a hard time trying to find the dynamotor supply.

Good luck
Paul N6FEG

>NEW JERSEY ANTIQUE RADIO CLUB
>Indoor RADIO SWAPMEET
>Saturday, Feb. 21, 1998 -
>At the National Guard Armory - Freehold, NJ.
>
>The New Jersey Antique Radio Club will present its all-indoors Winter
>Swapmeet at The Freehold National Guard Armory,8:00 AM to 1 PM, with
>seller setup beginning at 7:00 AM rain-or-shine. Vendors for the
>Swapmeet will be offering a spectrum of collectible old-time radios -
>table-model, console, transistor, Bakelite, Communications Receivers -
>with relatedliterature and parts. Everyone is welcome!
>
>Directions are available at: http://www.eht.com/oldradio/swap.html
>
>MILITARY GEAR AND TEST EQUIPMENT FOR NJARC AUCTION, 2-21-98

>PE-125AX vibrator power supply (Signal Corps)

>Al Klase - N3FRQ
>skywaves@bw.webex.net
>Flemington, NJ 08822
>Web Page: http://www.webex.net/~skywaves/home.htm

>
>

Paul Thekan - Speaking for Himself
Paul.Thekan@eimac.cpii.com

Date: Tue, 17 Feb 1998 10:42:21 -0500
From: don merz <71333.144@compuserve.com>
To: boatanchors@theporch.com
Subject: Boatanchors For Sale
Message-ID: <199802171046_MC2-33A4-73EF@compuserve.com>

Vintage Radio Gear/Literature For Sale and Wanted

CONTACT: Don Merz, N3RHT: 47 Hazel Drive, Pittsburgh, PA 15228.
412-234-8819 (weekdays, EST or leave a message anytime).
71333.144@compuserve.com

FOR SALE

Patterson PR-16 HF receiver. This is a 1939-vintage 17-tube, chrome chassis HF receiver with BFO. The inside of this radio looks nice. Working too. But the outside has been repainted gray (it should be black powdercoat according to the photos I have seen). The knobs may not be original but photo evidence is inconclusive--it's hard to tell. In total, the set looks good even though it is less than 100% original. The dial and meter bezels are in place and look good. There are no unoriginal holes. I have a large wooden speaker for this radio that matches the cabinet style and I believe this is the matching speaker even though it is huge and light-colored wood. With Riders data and PR-15 manual copy. This is a pretty uncommon boatanchor. $225

Patterson PR-16 Chassis Only. This is the chassis for a Patterson PR-16. It has one coil replaced with a modern unit and the S-meter is missing. There are no knobs. But the chrome is good and it is otherwise all original. This is a nice-looking 17-tube, chrome chassis. $25

Meissner S-meter. This is the correct s-meter for the Meissner Traffic-Master and other high-end pre-war Meissner kits. $17 PPD

Military SCR-283 Aircraft Radio Set. This set was a precursor to the WWII command sets. I have a picture of this rig in a 1930's P-26 "Peashooter" aircraft. The set includes the BC-AO-430 Radio Transmitter and BC-AO-429 Receiver. Coverage is continuous from 2500kc - 7700kc using plug-in coils in both RX and TX. Accessories included are the dynamotor BD-AO-93, control box BC-AO-231, antenna switching relay BC-AO-408, TX coils C-355, C-381, C-382, C-383, C-385 and one TX coil case CS-47, spline knob MC-127 and switch knobs(2) CW-23053, receiver mount FT-99 and RX coils C-346 and

C-350. The included coils cover both 40 and 80 meters. I have never had this running but it is all original. Some tubes are missing. RX and TX look great. The dyno and control box have some flaking paint. A fine addition to any military collection. With original manual. $260

HP 411A RMS AC voltmenter. Looks and works good. No probes or power cord. Like all this old HP gear, you need some extra bench space to fit this thing. All original. $45

HP 211A Square Wave Generator. Same style cabinet as 411A above. Nice square wave generator with 75 ohm output. Looks good and works perfectly. Even larger than the 411A though... $35

Carron Model CCA Audio Beat Frequency Oscillator. Very old oscillator with beautifil brown and gray ront panel with gold pinstriping. Uses tuning eye tube which is missing. Dial pointer broken off (easily replaced). Uses 6 volt metal tubes but I know nothing else about this. As-is. $14 PPD

RCA WR-39C Television Calibrator. 1951-vintage signal generator with TV-specific features in desktop cabinet. Style matches other RCA WR-xx instruments. Tube lineup is 2-6J6, 2-6BH6, 1-6AS6, 1-6C4, 1-0A2 and 1-6X4. With original manual. $20 PPD

RCA WR-59B Television Sweep Generator. 1950-vintage TV sweep generator that has IF sweep range also. Style matches other RCA WR-xx instruments. Tube lineup is 2-6J6, 2-6C4, 1-6AT6, 1-6X4. With original manual. $20 PPD

RCA WR-36A Dot-Bar Generator. 1954-vintage TV dot-bar generator in desktop cabinet. Style matches other RCA WR-xx instruments. Tube lineup is 4-12AU7, 1-6U8, 1-6X4. With manual copy. $20 PPD

Tektronix 513D Oscilloscope. Very old Tek standalone 18mhz general purpose scope. This looks excellent and was working about 2 years ago. Now I am reluectant to apply power to it without checking it out first and that's just too much work. With original manual. $40 includes shiping east of the Mississippi, $50 to the west.

Tektronix 513D Oscilloscope. Very old Tek standalone 18mhz general purpose scope. This looks decent and is complete. I was keeping it as a parts unit for the 'scope above. I have never powered this up and it is assumed to be unworking. $10

Heathkit HX-10 Marauder original manual. Cover is loose, many pages are dog-eared. But it's all there. $13 PPD

Heathkit HWA-2036-3 AC Power Supply original manual. Good. $9 PPD

Military PE-104 vibrator power supply. This fits in a compartment in receiver/transmitter BC-654 (part of SCR-284) and powers the receiver. Brand new in the box. Untested but these always need recapping etc before they can be used. $18

Millen 92101 "Antenna Matching Preamplifier." This is an active antenna tuner for receive only. Uses plug in-coils, 3 included: 27-32mc, TV channel 3 and 13-15mc (new-in-box). Looks excellent or better. Untested (but there's not much to it). Requires external power supply (actually it was designed to be powered from the receiver's accessory socket). With manual copy. $24

RCA Victor Victrola 7-TR-3 portable reel-to-reel recorder. Beautiful shape inside and out. Records and plays back weakly. I bet a few caps and

a couple resistors would bring this to 100% in a hurry. Nice. $10

Supreme 189 Signal Generator. 1936-vintage test instrument in sloped-front wooden case. Black bakelite front panel with neat pinstriping. Airplane-style dial. 110kc-32 mc in 4 bands. Wood is good looking but has some chips out of the back panel. Compartment with hinged door houses junky test leads and AC cord. Very nice antique. Untested. $28

Jackson 106 signal generator. late-40's I'm guessing. Blue hammertone paint job with white highlights and knobs. Dirty all over and paint has some surface rust in spots. Untested and assumed to be unworking. $9

Jackson 112 Condenser tester. Styled to match 106 signal generator above. Nice looking. Untested and assumed to need restoration. $9

Icom IC-215 Portable 2-Meter FM Transceiver. Famous design that looks kinda like a camera. 15 channels xtal controlled. 3 watts "hi" power. With original mic, carry strap, 12VDC car adapter, original manual and extra crystals. All 15 channels are crystalled: 3 simplex: 146.52, .55 & .94 plus 12 repeater channels with 600khz offset: 146.16, .34, .22, .28, .78, .31, .325, .07, 147. 69, .75, .78, 66, .93. Working as designed. A fun collectable. About 1977-vintage. $170

Military Signal Corps Combination Tester 1183-SC made by Triplett under order number 27101-PHILIA-43. This is a combination tube tester and V-O-M that is part of Test Set I-56-J. Paint is very dirty and shows lots of random abuse. Clasp and handle parts are rusty. Leather handle is missing. Inside is dirty but should clean up excellent. The tube chart is missing but is reproduced in the manual. Untested. With original manual. $34

Military I-56-C original manual. The I-56 series of test sets include meters and a tube tester. These sets were used on AAF radios throughout WWII. This manual gives specific test instructions for testing SCR-183, BC-167, BC-191, BC-189, SCR-178, SCR-203 and SCR-209 as well as all the general data on using I-56 to test anything. Earlier I-56 variants used separate volt, ohm and amp meters. Later ones used VOMs such as I-176. Neat WWII manual. $25

GE Progress Line: I have a bunch of GE Progress Line stuff, mostly low-band which I had intended to put on 6 meters. I am never going to find time for this and want to dispose of all of it. I have strips, manuals, 2 mobile rigs and a desk-side base station cabinet. The base station stuff is clean and working. The mobiles are dirty and untested. Make a (low) offer as I just want to get rid of it all.

Victor 16MM projector. Very old projector with audio amplifier using 6V6's. Mechnisim runs but will not keep its loops. Filaments in audio amp do not light but I have not looked into this. With original manual. $10

FREE STUFF (you pay shipping)

1 Inch Paper Tape. This is for 8-level machines (ASCII-Teletype Models 33 and up). I have about 9 full rolls and 10 partial rolls.

28RO base--just the base with the motor. The motor is a governed AC type. No typing mechnism or cabinet--just the base.

Model 15RO soundproof cover. Original gray powdercoat paint. Glass is
cracked (asily replaced) One spring-loaded access door needs put
back on (I have the door). No copy holder and no Teletype name tag.
Looks excellent.
Teletype Model 43 ASCII terminal. Printing terminal. Looks good.
Complete. Untested.
Paper for Model 43 (odd 12" width). 2 partly-used boxes.
Ribbons for Model 43. 2 Boxes.

CONTACT: Don Merz, 47 Hazel Drive, Pittsburgh, PA 15228
412-234-8819 (weekdays, EST)
Internet: 71333.144@compuserve.com

End of BOATANCHORS Digest 1926

>From ???@??? Wed Feb 18 05:37:23 1998
Message-Id: <199802180142.TAA04980@sco.theporch.com>
Date: Tue, 17 Feb 1998 19:42:39 CST
Subject: BOATANCHORS digest 1927

BOATANCHORS Digest 1927

Topics covered in this issue include:

1) Re: Cathode modulation ??
by Ken Gordon <keng@uidaho.edu>
2) Who sent 4-400?
by Laird Tom N <LairdTomN@JDCORP.deere.com>
3) Re: Last Call: TR Switch Info
by Ken Gordon <keng@uidaho.edu>
4) FT-101B tube swap out
by Laird Tom N <LairdTomN@JDCORP.deere.com>
5) Re: washer on spindle
by Ken Gordon <keng@uidaho.edu>
6) Really Neat Quenched Spark Gap
by arc5@ix.netcom.com
7) relay for heath Linear SB220
by Mary & Ray Jefferson <w7fni@micron.net>
8) Help needed on Scott SLRM
by tomash1@airmail.net (Tom Aschenbrenner)
9) Re: Help needed on Scott SLRM
by Ken Gordon <keng@uidaho.edu>
10) Collins 51J-4 trouble
by "sierra.victor" <sierra.victor@swipnet.se>
11) cathode modulation

 by Bill Jarvis <B.H.Jarvis@hw.ac.uk>
 12) ZENITH WOOD/TRANSO. FOR TRADE
 by arc5@ix.netcom.com
 13) Re: Si diodes, 5U4s, and filter cap ratings
 by Sandy W5TVW <ebjr@worldnet.att.net>
 14) Re: Collins 51J-4 trouble
 by Morris Odell <morriso@vifp.monash.edu.au>
 15) Re: ultra-audition
 by "Robert P. Okas" <vintage@best.com>
 16) Free for shipping: ART-13 Modulation Xfmr
 by Bill Coleman N2BC <n2bc@ibm.net>
 17) Pogo Transceiver
 by Andre Guibert <aguibert@sympatico.ca>
 18) Re: (fwd) Oddball Collins?
 by gwoods@albany.net (Gary Woods)
 19) Re: Si diodes, 5U4s, and filter cap ratings
 by "Arden Allen" <aallen@sirius.com>
 20) Re: Russian Nationals?
 by "David L. Thompson" <thompson@mindspring.com>
 21) Free ART-13 Modulation Xfmr - GONE !
 by Bill Coleman N2BC <n2bc@ibm.net>
 22) Re: Oddball Collins?
 by "Arden Allen" <aallen@sirius.com>
 23) Re: Transformer Temperatures
 by Eugene Rippen <soundval@foothill.net>
 24) National AGN Dial Scale
 by gpewitt@execpc.com
 25) Good news/Bad news
 by gpewitt@execpc.com
 26) Help for friend
 by Dave Wood <W4EJ@coastalnet.com>
 27) WTB HQ-100A original manual
 by Dave Wood <W4EJ@coastalnet.com>
 28) Re: Pogo Transceiver
 by "Mike B. Feher" <n4fs@monmouth.com>
 29) Re: Si diodes, 5U4s, and filter cap ratings
 by Sandy W5TVW <ebjr@worldnet.att.net>
 30) RAO-2/NC-120 manual-WTB/T
 by Bob Login <jlogin@gville.mindspring.com>
 31) Borderline Boatanchor Stuff Wanted
 by PLT1032@aol.com

Date: Tue, 17 Feb 1998 08:32:10 -0800 (PST)
From: Ken Gordon <keng@uidaho.edu>
To: BEN NOCK <G4BXD@compuserve.com>
Cc: Old Tube Radios <boatanchors@theporch.com>

Subject: Re: Cathode modulation ??
Message-ID: <Pine.BSF.3.95.980217083033.23502B-100000@piobaire.mines.uidaho.edu>

> I was just wondering if anyone had tried feeding mod into the key jack of
> a tx, assuming it keys the cathode of course, and what results have been
> found.

I have a cathode modulater circuit. Plugs into the key jack. Works very
well. I used one years ago in my DX-35 as an experiement. Worked
superbly then.

Will post the cathode modulator circuit to my web page ASAP and will then
advise the list.

Ken W7EKB

Date: Tue, 17 Feb 1998 10:47:00 -0600
From: Laird Tom N <LairdTomN@JDCORP.deere.com>
To: "'BA'" <boatanchors@theporch.com>
Subject: Who sent 4-400?
Message-ID: <0958DD57326BD011813300805FBE98DA02D72AA0@e90corp2.dx.deere.com>

Would the person who sent me the 4-400tube and socket to try out, please
contact me
your return address was misplaced.

Tom Laird WC9M Moline, IL
Deere & Company
LairdTomN@JDCorp.deere.com

Date: Tue, 17 Feb 1998 08:47:24 -0800 (PST)
From: Ken Gordon <keng@uidaho.edu>
To: ARONGV@aol.com
Cc: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: Last Call: TR Switch Info
Message-ID: <Pine.BSF.3.95.980217084644.23502I-100000@piobaire.mines.uidaho.edu>

> Instead of dragging this on forever, the cutoff will be Wednesday at midnight
> Central time. By then I will have sent enough (10 already faxed as of this
> morning) that a request to this list in the future will get ya several offers
> for copies.

Also, I intend to scan this info and put it on my web page ASAP.

Will post to the list as soon as I have it done.

Ken W7EKB

Date: Tue, 17 Feb 1998 10:54:56 -0600
From: Laird Tom N <LairdTomN@JDCORP.deere.com>
To: "'BA'" <boatanchors@theporch.com>
Subject: FT-101B tube swap out
Message-ID: <0958DD57326BD011813300805FBE98DA02D72AA1@e90corp2.dx.deere.com>

I got a FT-101B and need to change finals, I bought two new Sylvania's
and
installed them, they seem to want to TAKE OFF on me. Is there anyone who
has
done this with Sylvania tubes? Do I need to change any capacitors or is
my
neutralization just not set right? Since this is a hybrid, you may want
to
e-mail me directly if you have answers for me.

I have a sheet that tells me how to install 8950's by changing the
filaments from series to parallel, but nothing on how to install
American tubes in place of the
Japanese ones.

Tom Laird WC9M Moline, IL
Deere & Company
TL39597@deere.com

Date: Tue, 17 Feb 1998 08:54:32 -0800 (PST)
From: Ken Gordon <keng@uidaho.edu>
To: Bill Jarvis <b.h.jarvis@hw.ac.uk>
Cc: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: washer on spindle
Message-ID: <Pine.BSF.3.95.980217085345.23502K-100000@piobaire.mines.uidaho.edu>

> Someone asked what a single rotatable washer, near a coil, was for.
>

> Just seen one described. It's a shorted turn (I got that far myself!)
> which may be turned from parallel to, to perpendicular to, L. It has the
> effect of reducing L and thereby permitting very fine tuning.

This method is used in the TU-X tuning units used in the BC-191/375 tx.

Ken W7EKB

Date: Tue, 17 Feb 1998 11:00:29 -0600 (CST)
From: arc5@ix.netcom.com
To: boatanchors@sco.theporch.com
Subject: Really Neat Quenched Spark Gap
Message-ID: <19982171058035705@>

Friend of mine showed me a photo this weekend.
An early-20s radio experimenter built a
quenched-gap for a spark transmitter.
At least- I *think* that's what it is.
He carved-out a wooden holder and installed
30 Lincoln and Indian-Head pennies, seperated
by thin mica washers! Soldered wires on the end pennies.
I would have thought it would have been cheaper to cut-up
a tin can or something. Neat to look at, anyways.

73 Dave AB5S
arc5@ix.netcom.com

Date: Tue, 17 Feb 1998 11:45:59 +0000
From: Mary & Ray Jefferson <w7fni@micron.net>
To: boatanchors@theporch.com
Subject: relay for heath Linear SB220
Message-ID: <34E97877.4A0C@micron.net>

Greetings: I am desperatly searching for a replacement relay designated
as RL1(ll0v. triple pole double throw) for Heathkit Linear SB220.
Prefer unused but will take a real good used one. Have repaired,
cleaned etc.,mine but continues to give problems.
appreciate all help and suggestions.

w7fni...for over 60 yrs

Date: Tue, 17 Feb 98 12:03:00 -0600 (CST)
From: tomash1@airmail.net (Tom Aschenbrenner)
To: boatanchors@theporch.com
Subject: Help needed on Scott SLRM
Message-ID: <m0y4rM6-000CGXE@mail.airmail.net>

Hello....could those of you who have SLRM rcvrs pls look at the
power switch and spkr on/off switch and tell me the type of
handle on each? I have a SLRM here that has a bad power switch
and I need to replace it....trouble is either it has been
replaced before or by design the handle on the spkr switch is
not supposed to match that of the power switch....my power
switch has a long bat handle (black) and the speaker switch
has a short handle (with small round ball at end) and is silver
in color.
 Thanks for the help. Tom A. - Dallas, Tx.

Date: Tue, 17 Feb 1998 10:14:27 -0800 (PST)
From: Ken Gordon <keng@uidaho.edu>
To: Tom Aschenbrenner <tomash1@airmail.net>
Cc: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: Help needed on Scott SLRM
Message-ID: <Pine.BSF.3.95.980217101347.25104A-100000@piobaire.mines.uidaho.edu>

> Hello....could those of you who have SLRM rcvrs pls look at the
> power switch and spkr on/off switch and tell me the type of
> handle on each? I have a SLRM here that has a bad power switch
> and I need to replace it....trouble is either it has been
> replaced before or by design the handle on the spkr switch is
> not supposed to match that of the power switch....my power
> switch has a long bat handle (black) and the speaker switch
> has a short handle (with small round ball at end) and is silver
> in color.

Sounds to me as though the speaker switch has been replaced in the past.

Black bat handle is correct in my experience.

Ken W7EKB

```
------------------------------

Date: Tue, 17 Feb 1998 19:34:59 +0100
From: "sierra.victor" <sierra.victor@swipnet.se>
To: "Old Tube Radios" <boatanchors@theporch.com>
Subject: Collins 51J-4 trouble
Message-ID: <01bd3bd2$c1416020$9056f482@sekrasw104>

Det h%r %r ett multipart-meddelande i MIME-format.

------=_NextPart_000_003B_01BD3BDB.2305C820
Content-Type: text/plain;
     charset="iso-8859-1"
Content-Transfer-Encoding: quoted-printable

Hello folks:
Have just got my new old and first Collins ever. Its a 51J-4 serial =
5799.
It looks good but need some job here and there. One trouble is when I
listen to strong AM-stations the audio get distortion and hum but =
backing
the RF-control helps. It seems that something in AVC-circuit or detector
stage is faulty?=20
I would be very glad for some tips.
Regards
Sven, SM3SV


------=_NextPart_000_003B_01BD3BDB.2305C820
Content-Type: text/html;
     charset="iso-8859-1"
Content-Transfer-Encoding: quoted-printable

<!DOCTYPE HTML PUBLIC "-//W3C//DTD W3 HTML//EN">
<HTML>
<HEAD>

<META content=3Dtext/html;charset=3Diso-8859-1 =
http-equiv=3DContent-Type>
<META content=3D'"MSHTML 4.71.1712.3"' name=3DGENERATOR>
</HEAD>
<BODY bgColor=3D#ffffff>
<DIV><FONT color=3D#000000 face=3DArial size=3D2>Hello =
folks:</FONT></DIV>
<DIV><FONT color=3D#000000 face=3DArial size=3D2>Have just got my new =
old and first=20
Collins ever. Its a 51J-4 serial 5799.</FONT></DIV>
```

<DIV>It looks good but need =
some job here=20
and there. One trouble is when I</DIV>
<DIV>listen to strong =
AM-stations the=20
audio get distortion and hum but backing</DIV>
<DIV>the RF-control helps. =
It seems that=20
something in AVC-circuit or detector</DIV>
<DIV>stage is faulty? =
</DIV>
<DIV>I would be very glad =
for some=20
tips.</DIV>
<DIV>Regards</DIV>
<DIV>Sven, =
SM3SV</DIV>
<DIV><FONT color=3D#000000 face=3DArial =
size=3D2> </DIV></BODY></HTML>

------=_NextPart_000_003B_01BD3BDB.2305C820--

Date: Tue, 17 Feb 1998 19:02:38 +2400
From: Bill Jarvis <B.H.Jarvis@hw.ac.uk>
To: boatanchors <boatanchors@theporch.com>
Subject: cathode modulation
Message-ID: <199802171902.TAA23992@punt1.hw.ac.uk>

Ben Nock asked about possibly cathode modulating via a morse key jack.
We did that at school with one of the military sets; not sure which -
18, 38, or the posh American one we obtained latterly.

When we put the carbon mike insert directly in series with the cathode
it overmodulated so dramatically that we had to shunt it with a fixed R
to make the AM acceptable. No battery or transformer was needed. We had
to leave a 0.1 uF bypass C in place. (Not surprisingly.)

Bill
GM8APX, qthr=No 6, EH4 6JY==No Rectangulars=Cave Felem==Ikke Hawkering

Laudator temporis acti: 'Me puero...'

Net-Tamer V 1.10 - Registered

Date: Tue, 17 Feb 1998 13:35:44 -0600 (CST)
From: arc5@ix.netcom.com
To: baswaplist@foothill.net
Subject: ZENITH WOOD/TRANSO. FOR TRADE
Message-ID: <1998217133513341@>

I have the following Zenith radios for trade:

Nice, complete R600 Transoceanic with orignal schem. paper inside.
Good condition complete (less leather handle) 6G601MH "Sailboat" portable.
Beautiful 8A10 large end-table. Exc. Condi. With back/antenna. Outstanding finish.
Really pretty 5R316 table- Most underrated Z-table going. Very nice looking.
"9.5" orig. finish working 6S128 Tombstone. Recapped, retubed and sounds great.
7J232 "Walton." Finsh 70%, Venr 100%. Needs grill cloth, 1 knob. Elec. good/cmplt.

I am interested in these "ARC-5" command set military radios *ONLY*:
(Please- other offers will not be considered)

T-15, T-16, T-89 and T-90 transmitters.
R-112, R-113 receivers.
RAT and RAT-1 units and accessories.
RAV units and accessories.
BC-455 with field mod for 28-41 MC. (has strange ant. connector on side).
NRL-modified units with crystal control.
O-4/ARC-5 alignment oscillator.
TN-6/ARC-5 antenna tuner.
Any "ARC-5" command set factory- or Signal Corps.-marked in Cyrillic.

Unmodified gets priority.
Would like to hear about any *factory-original* or WW-II era field modded command sets of uncommon freqs or designs.

Regards,
Dave Stinson AB5S
arc5@ix.netcom.com
Austin, Texas

Date: Tue, 17 Feb 1998 19:56:33 +0000
From: Sandy W5TVW <ebjr@worldnet.att.net>
To: spr@earthlink.net, boatanchors@theporch.com

Subject: Re: Si diodes, 5U4s, and filter cap ratings
Message-ID: <19980217195628.AAB20920@LOCALNAME>

At 11:38 PM 2/16/98 -0800, you wrote:

>and Scott sez:
>
>Most BAs use 5U4 or 5Y3 rectifiers, which warm up much faster than the
>indirectly heated tubes that consume the current. Therefore the filter
>caps get charged to the peak voltage with these tubes, and will get about
>the same treatment with sand state diodes.
>
>Gear that uses 5V4, 5AR4, 6X5, 6X4, or 83V rectifiers will not be in this
>category as these are indirectly heated tubes that warm up at about the
>same rate as the rest of the tubes in the equipment.

Be aware of two factors: Directly heated cathode tubes (5U4, 5R4, 5Y3, 80,etc.) Have a greater voltage drop than indirectly heated cathode tubes (6X4, 6X5, 5V4 etc.) Lowest of all is the "gas" and mercury vapor types which are generally unsuitable for receiver use (due to RF hash generated).

Some manufacturers like E. F. Johnson for instance, use indirectly heated types for their inherent "time delay" before they deliver full voltage. (Sort of a 'poor man's delay relay').

Replacement of tube rectifiers such as the 5U4 etc. with silicon diodes (which have very little voltage drop!) can raise the peak and average voltages delivered to the filter network and apparatus it powers. So one must be careful in this regard. Also some type of current limiting is advised (such as small value resistors) in series with the AC supplying the high voltage to each silicon diode to prevent excessively high inrush currents. These can also be adjusted to deliver the same voltage as the tube replaced does. It is very easy to build a solid state replacement with limiting resistors in an old tube base, and substitute this for the rectifier tube. In this way, you can return
things to "normal" by merely replacing your "substitute" with the appropriate rectifier tube.
73,
E. V. Sandy Blaize, W5TVW
"Boat Anchors collected, restored, repaired, traded and used!"
417 Ridgewood Drive
Metairie, LA., 70001

860 Hartley 'ECO' construction "on hold"**
*** Looking for a TRC-10 transceiver ******
*** Looking for an RAL receiver **********

Date: Wed, 18 Feb 1998 08:40:29 +1100
From: Morris Odell <morriso@vifp.monash.edu.au>
To: sierra.victor@swipnet.se
Cc: boatanchors@sco.theporch.com
Subject: Re: Collins 51J-4 trouble
Message-ID: <34EA03CD.369A@vifp.monash.edu.au>

Hi Sven,

> Have just got my new old and first Collins ever. Its a 51J-4 serial
> 5799.
> It looks good but need some job here and there. One trouble is when I
> listen to strong AM-stations the audio get distortion and hum but
> backing
> the RF-control helps. It seems that something in AVC-circuit or
> detector
> stage is faulty?
> I would be very glad for some tips.

You might check the back bias bypass capacitor. This is a "block" capacitor of about 20 mfd (I don't have the manual handy as I write this so I can't quote the part number) which is connected from the centre tap of the power transformer B+ winding to ground. It's mounted on an internal shield plate facing the rear of the receiver. Looking at the circuit it is effectively in series with the B+ filtering capacitors and if its capacitance falls it will cause hum and audio feedback as the audio gain is turned up. Try bypassing it with 47 mfd or so and see what happens. There's about 65 volts of dc across it.

As far as the agc is concerned, is the S meter moving? Has the Bill Orr product detector/AGC modification been installed? You can tell if this has been done if the BFO tube is a 6BE6 rather than a 6BA6. These sets have a low impedance agc line fed by an amplifier stage from the agc rectifier. You could try replacing the 12AU7 and/or 12AX7 tubes one of which is the rectifier and the other of which is the amplifier (again - no manual here). If the S meter is kicking up on CW or SSB signals then the AGC is unlikey to be too bad. I have found that even with 2 uf of extra capacitance installed to slow down the AGC in this receiver as recommended by Bill Orr, it's still a bit too quick for good SSB. Finally, check the operating conditions of the 6AQ5 audio output tube. This tube is fixed biased from the back bias system and if the voltage at its grid is more positive than -12 volts you will get disturbances of audio performance.

I recently went right over one of these lovely receivers which is my current main band scanner here and have become quite familiar with the

AGC and other circuits in it.

73 de Morris VK3DOC

Date: Tue, 17 Feb 1998 13:57:39 -0800 (PST)
From: "Robert P. Okas" <vintage@best.com>
To: Bill Jarvis <b.h.jarvis@hw.ac.uk>
Cc: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: ultra-audition
Message-ID: <Pine.BSF.3.96.980217135148.6611A-100000@shell14.ba.best.com>

Hello Bill,
 The Ultra-Audion is is Lee DeForest's version of the Armstrong regen. Instead of using a tickler coil, DeForest adopted the method you describe. Feedback is controlled by the capacitive divider between the grid, cathod and ground.

On Tue, 17 Feb 1998, Bill Jarvis wrote:

> Just seen a photocopy of an ancient article describing VHF and UHF Rxes.
> One paragraph says "The regenerative detector circuit is an ultra-audion
> oscillator". The aerial input tuning coil goes to anode, and - through
> 100 pF - to grid. HT goes by RFC to mid-point of tuning coil.
>
> That looks to me like a conventional oscillator. Maybe the autobias
> components are relevant: 100 pF and 5 megohms (Rx is for nominal 112
> MHz). (That dates it! - When, incidentally?)
>
> Does this help to answer the question "what is an ultra-audion"?

Date: Tue, 17 Feb 1998 22:15:50 -0800
From: Bill Coleman N2BC <n2bc@ibm.net>
To: boatanchors@theporch.com
Subject: Free for shipping: ART-13 Modulation Xfmr
Message-ID: <BMSMTP8877823470wf2awdc@pop3.ibm.net>

Consolidation of my junque box coughed up a modulation transformer for an ART-13 - push pull 811s to a single 813 if I recall correctly. Free to a good home for shipping (<10 pounds) from 13850. Next Tuesday is garbage day...

73 all, Bill

Bill Coleman (N2BC)

Email: n2bc@ibm.net

Date: Tue, 17 Feb 1998 17:25:34 -0500 (EST)
From: Andre Guibert <aguibert@sympatico.ca>
To: boatanchors@theporch.com
Subject: Pogo Transceiver
Message-ID: <199802172225.RAA21537@smtp11.bellglobal.com>

Bonsoir(Hi to all)

Any Pogo transceivers alive and well in the group?

Andre

Date: Tue, 17 Feb 1998 23:11:11 GMT
From: gwoods@albany.net (Gary Woods)
To: boatanchors@theporch.com
Subject: Re: (fwd) Oddball Collins?
Message-ID: <34ea1385.346421@mail.albany.net>

On Tue, 17 Feb 1998 16:28:20 GMT, you wrote:

>Larry...according to my info from the "Collins Quick Reference" by
>KK6HY, the 618-S is a transceiver, 1952-54 vintage, 2-25 Mhz, digital,
>100 W, AM,CW...67 lbs, 45 tubes. The military version is an
>RT-311/ARC-38.
>

Whaddaya mean, oddball? I spent a lot of hours operating one of those critters.. (In a P2V in the Pacific) "Digital" is a little grand; it was an analog synthesizer, built around a Collins PTO, tuned by the damndest collection of gears and rotary switches you'd ever hope to see, and another PTO-like thing that was an AFC discriminator, also tuned off the same gear train, that ran a servo-motor driven variable cap to correct frequency.

Another servo ran a whole rack of slugs (like the R-390, but auto-tuning), and yet another servo resonated the final tank, tapped for a constant 50 ohm output.

The antenna tuner was another marvel....

Worked great on 20 CW on the trailing wire antenna (I only heard this second-hand, of course).

Could radio check Tokyo from the deck at Barber's Point, HI on a good day.

--
Gary Woods O- K2AHC Public key at www.albany.net/~gwoods, or get 0x1D64A93D via keyserver
gwoods@albany.net gwoods@wrgb.com
fingerprint = E2 6F 50 93 7B C7 F3 CA 1F 8B 3C C0 B0 28 68 0B

Date: Tue, 17 Feb 1998 15:43:13 -0800
From: "Arden Allen" <aallen@sirius.com>
To: "Old Tube Radios" <boatanchors@theporch.com>
Subject: Re: Si diodes, 5U4s, and filter cap ratings
Message-ID: <199802172350.PAA00879@calimetrics.com>

Hmmm.....well said except for:

> It is very easy to build a solid state replacement with limiting resistors in an old
> tube base, and substitute this for the rectifier tube.

Not so fast. If you expect to compenste for rectifier plate resistance the limiting resistor(s) may dissipate a significant amount of power (~5W or more). You can't tuck a 5 or 10 watt resistor in a tube base very well. The problem of *exposed high voltage* must be solved as well as letting the heat out. A sturdy enclosure that prevents the unwary from being exposed to electric shock is NOT A TRIVIAL PURSUIT. Someone may attempt to yank that thing out while the power is on and you don't want it to come apart in his/her hand and POWIE!!

Have a safe and happy life.

Give your loved ones Gummy Bears
Arden Allen KB6NAX aallen@sirius.com

Date: Tue, 17 Feb 1998 18:51:11 -0500 (EST)

From: "David L. Thompson" <thompson@mindspring.com>
To: boatanchors@theporch.com
Subject: Re: Russian Nationals?
Message-ID: <1.5.4.16.19980217065203.108f153c@pop.mindspring.com>

At 09:50 PM 2/16/98 +0000, Larry Ware wrote:
>Evening folks; through the kindness of Bill Fizette and Alan Douglas,
>(both of the A.W.A.) I recently was given photocopies (several hundred!)
>of photographs from the National Radio Companies marketing dept.
>archives... :-) I'm still trying to index and sort through a lot of
>these, but I have a number showing NC-100 variants with Cyrillic
>(Russian) language markings on the front panels!
>(Gad-Zookes! Batman, how many of these were made?)
>I suspect I'm looking at WWII lend-lease program goods...

The Russians got a lot of help from the Allies during WW II. The receivers they got included National as noted, RCA AR-88's, and the BC-312/342/348 series. Somehow they also got a lot of Super Pros, too but those came from someone in Sweden (just found this in some Hammarlund research). The Russians took these designs and started rolling their own, too. UA1DZ had some history on this (Rag,,,sorry I got UA1CK confused here, but it was UA1DZ with the info). Unfortunately he is SK (UA1DZ that is). Someone said Leo, UA3CR might have some background, too.

Look in any old QST or CQ at the pics of Russian hams (and many Eastern European hams too) and you will see an old national, BC348, or AR-88. Many of the senior hams in Russia credit these old receivers as lifesavers in getting ham radio going again after WW II.

I do remember UA1DZ telling me in a QSO about 25 years ago that those old receivers were the base for the Russian and Bulgarian electronics industry. And they still make tubes in Russia today!

Do they still exist today. The answer is yes. Many of the Technical Universities still have old nationals and AR-88's in their labs and one ham sent me note that in Ural there is a group of active collectors...BA alive and well in Russia???

73 Dave K4JRB
thompson@mindspring.com

Date: Tue, 17 Feb 1998 23:58:13 -0800
From: Bill Coleman N2BC <n2bc@ibm.net>
To: boatanchors@theporch.com
Subject: Free ART-13 Modulation Xfmr - GONE !

Message-ID: <BMSMTP88778862814wf2awdc@pop3.ibm.net>

THX for the interest. It's spoken for. Listen for W5SUM on AM !!

Bill Coleman (N2BC)

Email: n2bc@ibm.net

Date: Tue, 17 Feb 1998 16:01:39 -0800
From: "Arden Allen" <aallen@sirius.com>
To: "Old Tube Radios" <boatanchors@theporch.com>, <mraine@compusmart.ab.ca>
Subject: Re: Oddball Collins?
Message-ID: <199802180009.QAA00904@calimetrics.com>

I think they call it cognitive dissonance. I remember the ARC-38, 38A. I
went to school on it at NATTC Memphis.
I later met a more modern radio which I remember as a 618S. Subminis,
ceramic outputs and bits o'sand. Someone please help.......my head
hurts......aarrgh!

Give your loved ones Gummy Bears
Arden Allen KB6NAX aallen@sirius.com

Date: Tue, 17 Feb 1998 17:34:43 -0800
From: Eugene Rippen <soundval@foothill.net>
To: DCrespy@aol.com
Cc: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: Transformer Temperatures
Message-ID: <34EA3AB3.2439@foothill.net>

I have for some time considered the 6X5 as THE absolutely
worst tube ever made. They are not only prone to breakdown,
but worse yet, they often short.
I have replaced many 6X5's with anything I could at the time.

Another thought!
We think of fans for xmtg, but a lot of Hallicrafters receivers
could certainly use one on the power transformer.

Gene

DCrespy@aol.com wrote:
>

> In a message dated 98-02-16 18:38:09 EST, Barry wrote:
>
> << The 15 or so watts consumed by the rectifier filaments
> are not needed by silicon diodes.
>

> Second, I should note that my radios with the hot transformers are ones with 5
> volt filament octal tube recitfiers. The cool ones have 6X4's. I think Barry
> is on to something here. Besides the 15 watts load, these tubes run hot and
> generally sit right next to the transformer.
>
> Harry KG5LO
> Saline MI

Date: Tue, 17 Feb 98 18:38:49 PST
From: gpewitt@execpc.com
To: boatanchors@listserv.tempe.gov, boatanchors@theporch.com
Subject: National AGN Dial Scale
Message-ID: <Chameleon.980217184317.gpewitt@execpc.com>

Gang, I just received a National type ACN dial and some
blank dial scales as well as the instructions. If anyone
wants a 1 to 1 xerox of the scales and instruction sheet
just send me a sase. If you want it unfolded best make
that an 8 1/2" by 11" envelope. No charge, I'm just trying to repay some of the
many favors done me by the
swell people on the list. 73 Gary

Name: Gary Pewitt N9ZSV/KT
 6120 W. Calumet Rd. Apt 204
 Milwaukee, WI 53223
 414 355 8147 Home 414 297 4307 Work
E-mail: gpewitt@execpc.com
Date: 02/17/98
Time: 18:38:49

Date: Tue, 17 Feb 98 18:44:15 PST

From: gpewitt@execpc.com
To: boatanchors@listserv.tempe.gov, boatanchors@theporch.com
Subject: Good news/Bad news
Message-ID: <Chameleon.980217185345.gpewitt@execpc.com>

Gang, good news: I will shortly be receiving a Globe Champion transmitter supposed to be in pretty nice shape.
Bad news: apparently both finals and both modulator tubes are kaput. Anyone got any 9909's (AX9909's?) or any 809's? Checked Fair Radio catalog, no show. Antique Electronics has them for a horrendous amount. I'm told the tubes were broken not burned out. Some comfort I guess. Was told the finals are cracked around the base and the modulators have pulled off anode caps, which might be repairable but I'd still like some new or newer ones. So if you have any for sale at a reasonable price or trade please let me know. Having a rig that doesn't work makes me itch. Thanks and 73 Gary

Name: Gary Pewitt N9ZSV/KT
6120 W. Calumet Rd. Apt 204
Milwaukee, WI 53223
414 355 8147 Home 414 297 4307 Work
E-mail: gpewitt@execpc.com
Date: 02/17/98
Time: 18:44:15

Date: Tue, 17 Feb 1998 20:10:01 -0500 (EST)
From: Dave Wood <W4EJ@coastalnet.com>
To: boatanchors@sco.theporch.com
Subject: Help for friend
Message-ID: <199802180110.UAA16685@abaco.coastalnet.com>

Can anyone help my associate with his halicrafters question?
Please reply directly to him. 73 Dave

Date: Thu, 5 Feb 1998 18:17:32 -0500
From: "Joseph R. Grenda" <70324.1036@compuserve.com>
Subject: Radios
Sender: "Joseph R. Grenda" <70324.1036@compuserve.com>

To: Blind.Copy.Receiver@compuserve.com
Content-Disposition: inline

Hi Dave:

I have got a Hallicrafters S-214 laying around. Best I can tell it needs an antenna. The telescoping type that receeds into the unit. Is it worth anything?

Hope all is going well down in Wilson!

Joe

Date: Tue, 17 Feb 1998 20:12:04 -0500 (EST)
From: Dave Wood <W4EJ@coastalnet.com>
To: boatanchors@sco.theporch.com
Subject: WTB HQ-100A original manual
Message-ID: <199802180112.UAA16983@abaco.coastalnet.com>

Hey gang, I'm trying to restore a real nice HQ-100 with a strange front end rf problem. Anyone have an original manual they are willing to part with?
73 Dave

Date: Tue, 17 Feb 1998 20:19:19 -0800
From: "Mike B. Feher" <n4fs@monmouth.com>
To: <aguibert@sympatico.ca>, "Old Tube Radios" <boatanchors@theporch.com>
Subject: Re: Pogo Transceiver
Message-ID: <199802180117.UAA07947@shell.monmouth.com>

Andre & Group -

I have two in my collection. One is obviously used and is the one on display and the other is mint in original box. In fact I was the first to open the box. It was exciting to open a box like that containing such a rare piece over 50 years after it was sealed. I have several vibrator power supplies for it as well but I am missing the chest set. If anyone can help with that it would be appreciated. Thanks - Mike

Mike B. Feher, N4FS
89 Arnold Blvd.
Howell, NJ, 07731
732-901-9193

> Any Pogo transceivers alive and well in the group?
>
> Andre
>

Date: Wed, 18 Feb 1998 01:20:19 +0000
From: Sandy W5TVW <ebjr@worldnet.att.net>
To: "Arden Allen" <aallen@sirius.com>, boatanchors@theporch.com
Subject: Re: Si diodes, 5U4s, and filter cap ratings
Message-ID: <19980218012017.AAA11723@LOCALNAME>

At 03:41 PM 2/17/98 -0800, you wrote:

>Not so fast. If you expect to compenste for rectifier plate resistance the
>limiting resistor(s) may dissipate a significant amount of power (~5W or
>more). You can't tuck a 5 or 10 watt resistor in a tube base very well.
>The problem of *exposed high voltage* must be solved as well as letting the
>heat out. A sturdy enclosure that prevents the unwary from being exposed
>to electric shock is NOT A TRIVIAL PURSUIT. Someone may attempt to yank
>that thing out while the power is on and you don't want it to come apart in
>his/her hand and POWIE!!
>
>
 Give me a break! *ANYONE* who does not use common sense
(not emphasized nowadays in the schools!) and reaches in to grab *hot*
resistors with the power on has NO BUSINESS opening the lid of a tube
type receiver! I always assumed that someone who wanted to delve into
"hollow state" electronics would not be *that* completely stupid!
73,

Sandy W5TVW

Date: Tue, 17 Feb 1998 20:15:11 -0500
From: Bob Login <jlogin@gville.mindspring.com>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: RAO-2/NC-120 manual-WTB/T
Message-ID: <199802180135.UAA31907@camel8.mindspring.com>

Hi Fellow BAer's-- Bought this radio at Orlando sans manual/schematic.
Would love to hve the documentation. Can anyone help? Willing to pay
for copy or buy original or trade for copy of something from my growing

collection? Let me know--73's Bob, AA8A

Date: Tue, 17 Feb 1998 20:40:52 EST
From: PLT1032@aol.com
To: boatanchors@theporch.com
Subject: Borderline Boatanchor Stuff Wanted
Message-ID: <968840f.34ea3c26@aol.com>

Looking for PRC-25 / PRC-77 components, including knobs, cases, battery boxes as well as any other accessories.

Bob Lindgren
Anaheim, Ca.

End of BOATANCHORS Digest 1927
